



PROJECTIONS OF EXPENDITURE FOR PUBLIC HOSPITALS IN IRELAND, 2018 TO 2035

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PROJECTIONS OF EXPENDITURE FOR PUBLIC HOSPITALS IN IRELAND, 2018–2035, BASED ON THE HIPPOCRATES MODEL

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FINDINGS

BASELINE EXPENDITURE, 2018

BASELINE EXPENDITURE BY SERVICE 2018

Public Acute Hospitals

€5,907m

Attendances
€1,095m

Discharges
€4,140m

ED
€419m

OPD
€676m

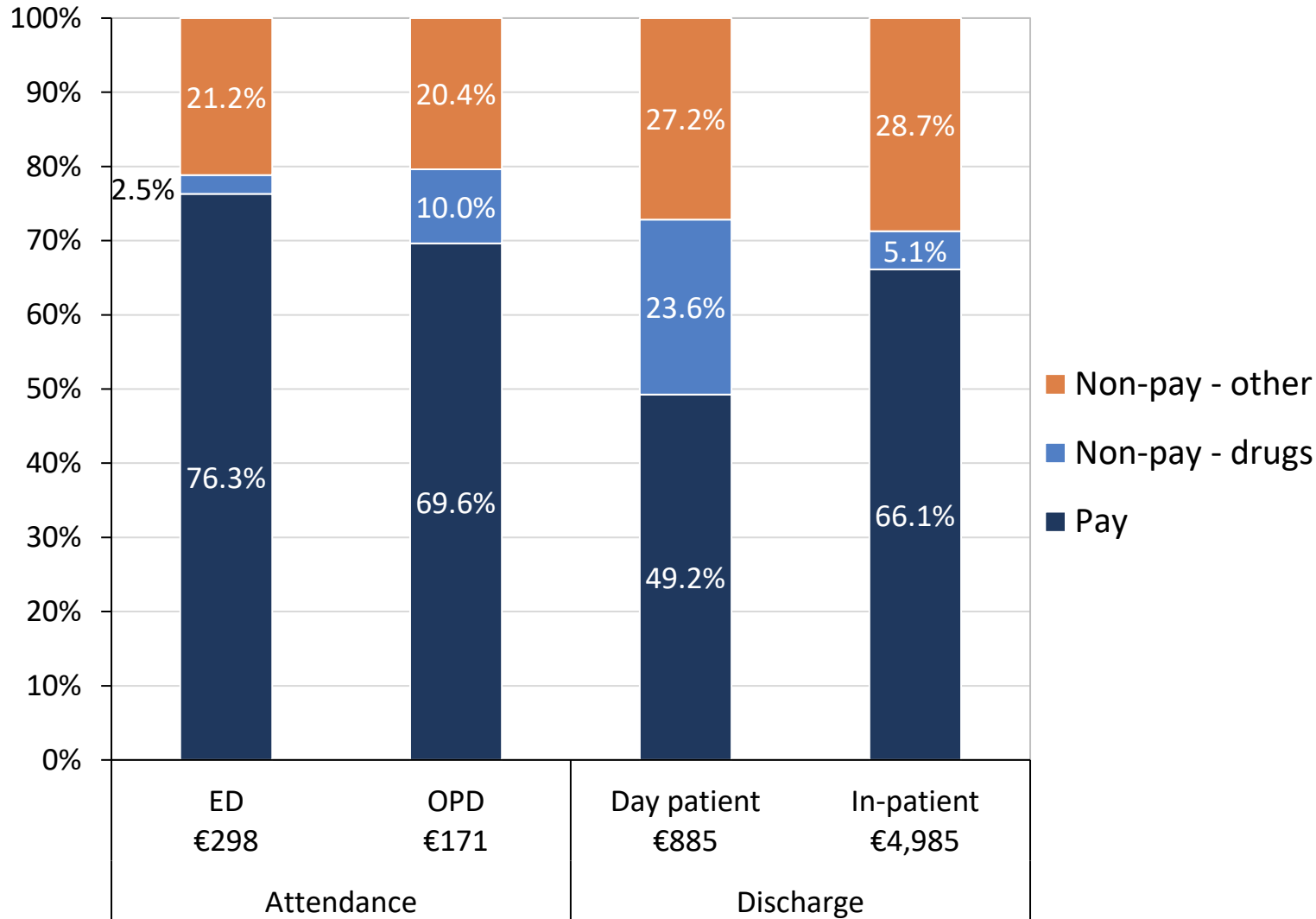
Day
patient
€920m

In-patient
€3,220.5m

Residual €672m

Public acute adult psychiatric in-patient unit/hospital* €179m

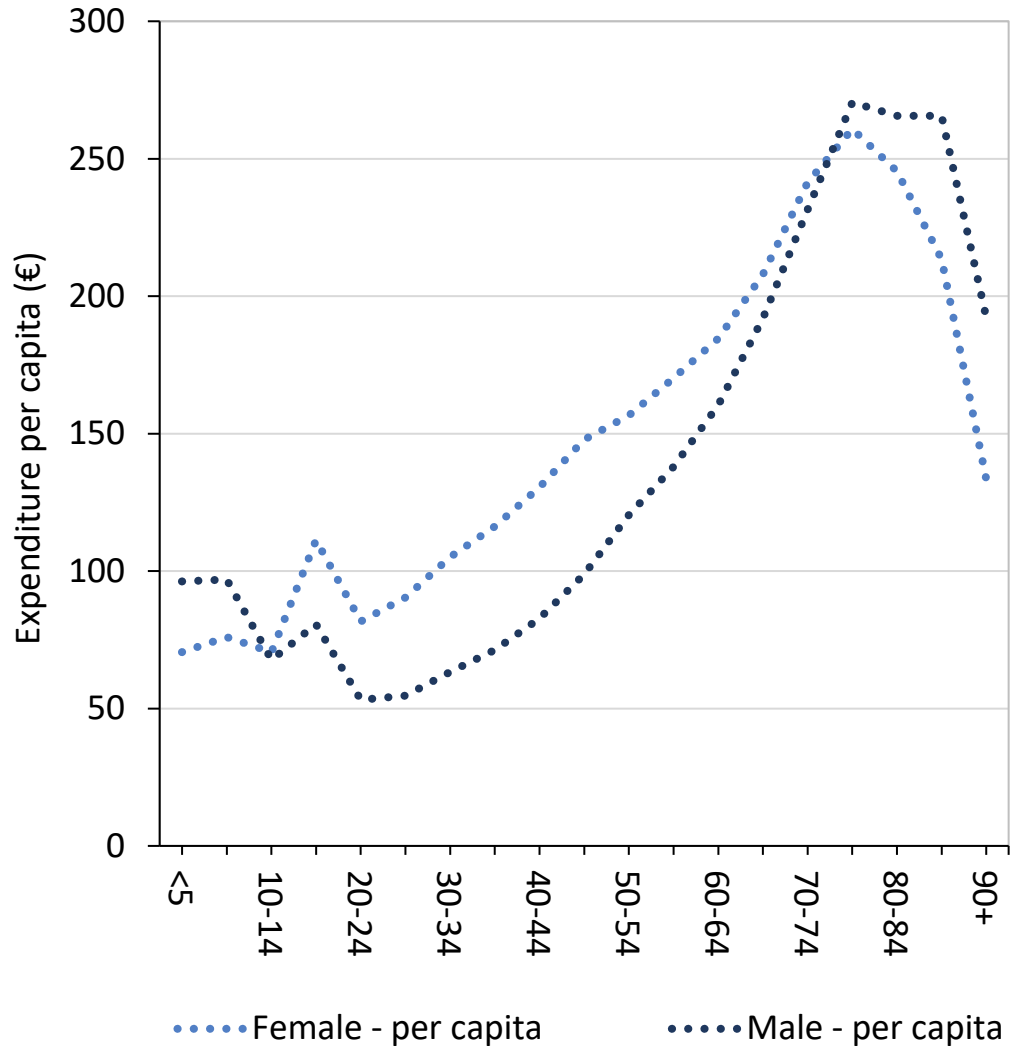
UNIT COST BY COMPONENT



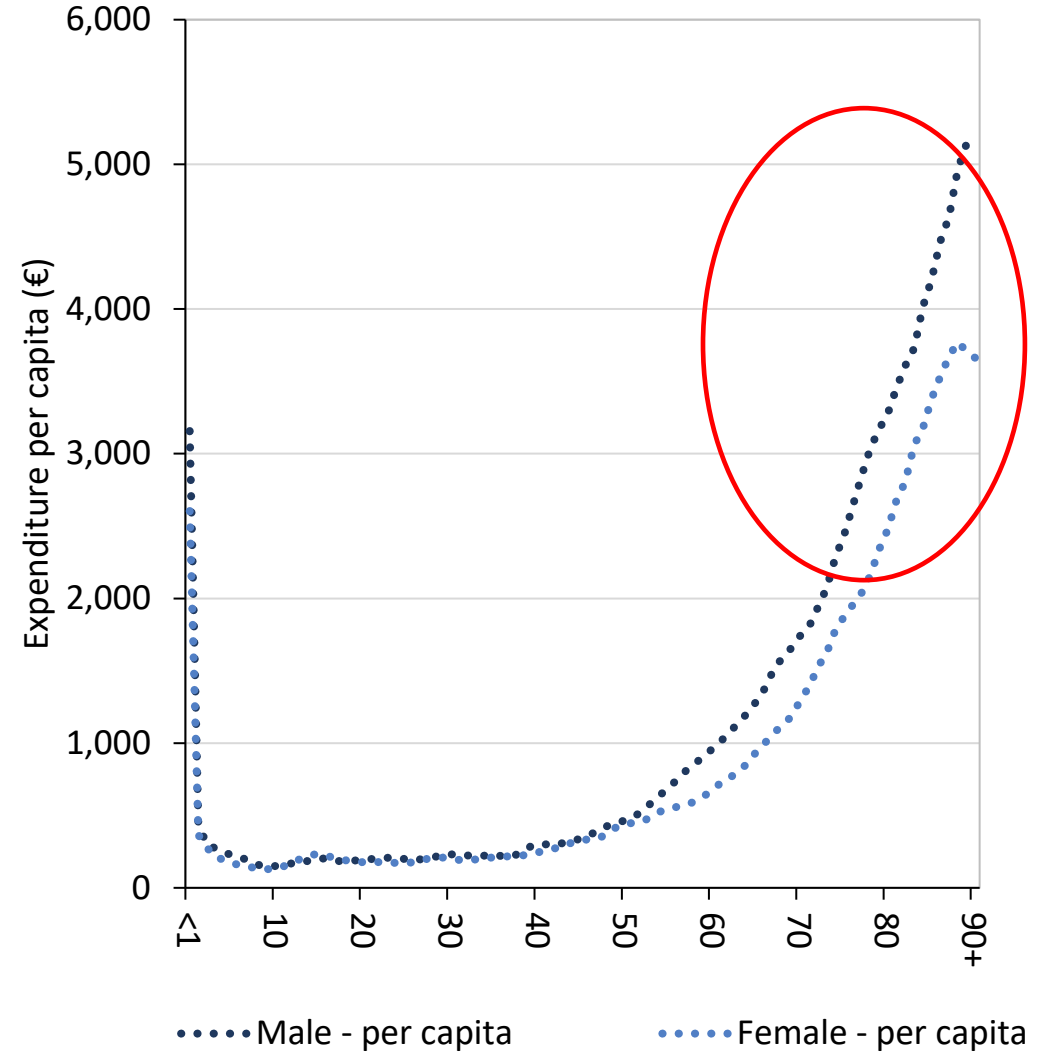
- The proportion of the unit cost related to each component varies across services
- Across all services pay is the single largest component of care costs
- For day-patients drugs account for approximately a quarter of the cost of care delivery

BASELINE EXPENDITURE 2018

Outpatients (excl. mat)



In-patients (excl. mat)





FINDINGS

PROJECTIONS 2018-2035



PROJECTION SCENARIOS

	Low pressure	Central	High pressure
Demand assumptions			
Population growth and ageing	Low	Central	Central
Healthy ageing	Dynamic equilibrium	Moderate healthy ageing	None
Cost assumptions			
Pay	<i>COMSO Delayed Recovery</i> 2.2% p.a.	<i>COSMO Recovery –</i> 2.5% p.a.	<i>COSMO Recovery –</i> 3.5% p.a.
Non-pay			
Drug cost	4.2% increase p.a.	5.2% increase p.a.	6.2% increase p.a.
Other	<i>COSMO Delayed Recovery –</i> inflation + 0.5 pct point p.a.	<i>COSMO Recovery –</i> inflation + 1 pct point p.a.	<i>COSMO Recovery –</i> inflation + 1 pct point p.a.

PROGRESS SCENARIO

Assumption	OPD	ED	Day patient and in-patient
Waiting list management	Backlog clearance from 2021–2025. Additional recurring activity to sustain lower waiting times.	N.A.	Backlog clearance from 2021–2025. Additional recurring activity to sustain lower waiting times.
Avoidable hospitalisations	N.A.	Linearly reduce ED attendances in line with in-patient avoidable hospitalisations each year.	Linearly reduce rate of avoidable hospitalisations each year, converging to 33% reduction by 2035.

PROJECTIONS OF EXPENDITURE, 2018-2035

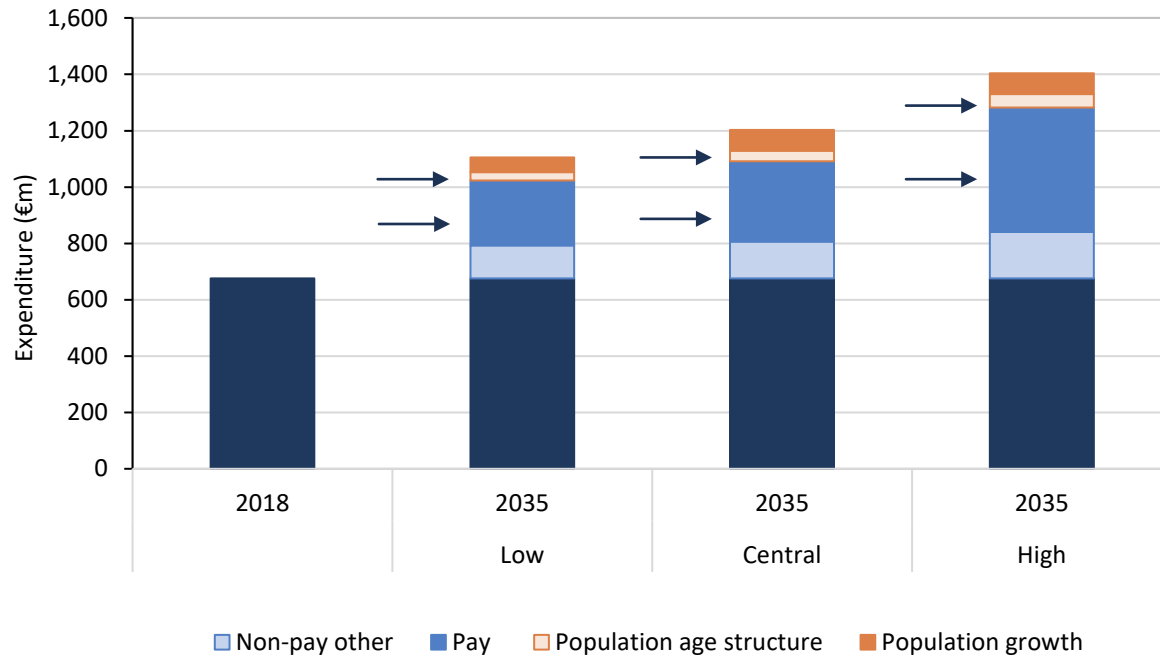
		Projected HCE growth 2018–2035 (%)		
		Low	Central	High
Emergency department	Real	12	17	19
	Nominal	62	78	109
Outpatient department	Real	12	16	18
	Nominal	63	78	108
Day patients	Real	21	27	31
	Nominal	92	119	161
In-patients	Real	25	33	38
	Nominal	86	109	150
Psychiatric In-patients	Real	16	19	25
	Nominal	69	81	120

PROJECTIONS OF EXPENDITURE, 2018-2035

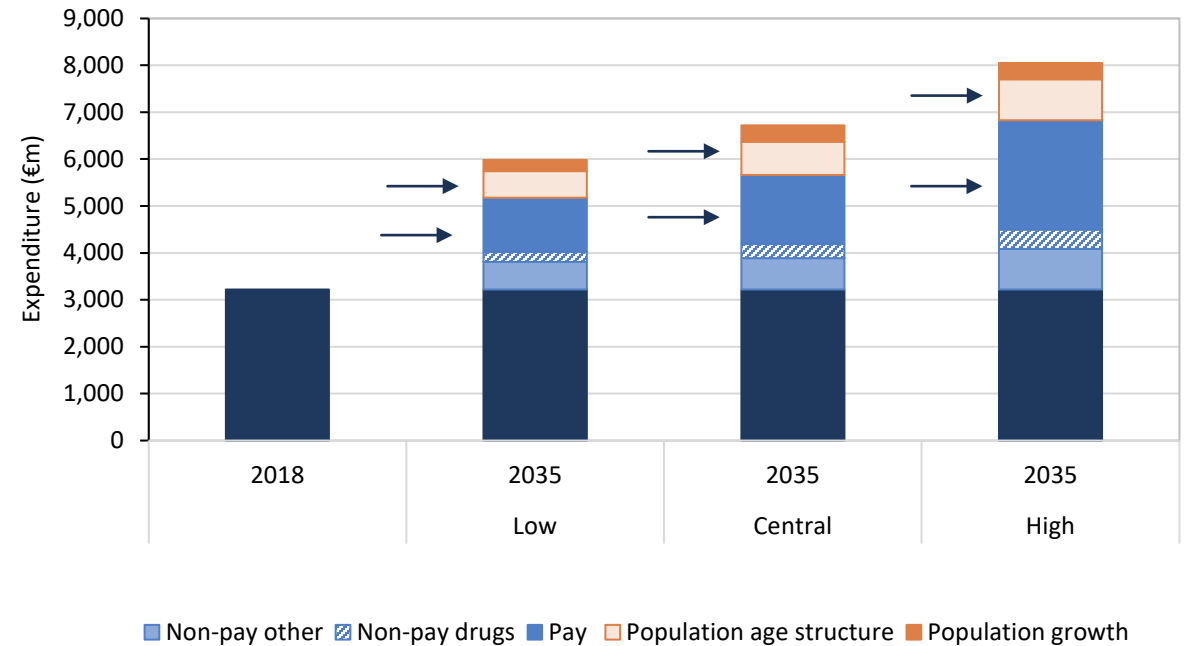
		Projected HCE growth 2018–2035 (%)			Projected HCE growth 2018–2035 (average annual %)		
		Low	Central	High	Low	Central	High
Emergency department	Real	12	17	19	1	1	1
	Nominal	62	78	109	3	4	4
Outpatient department	Real	12	16	18	1	1	1
	Nominal	63	78	108	3	4	4
Day patients	Real	21	27	31	1	1	2
	Nominal	92	119	161	4	5	6
In-patients	Real	25	33	38	1	2	2
	Nominal	86	109	150	4	4	6
Psychiatric In-patients	Real	16	19	25	1	1	1
	Nominal	69	81	120	3	4	5

DECOMPOSITION EXAMPLES – OUTPATIENT & IN-PATIENT

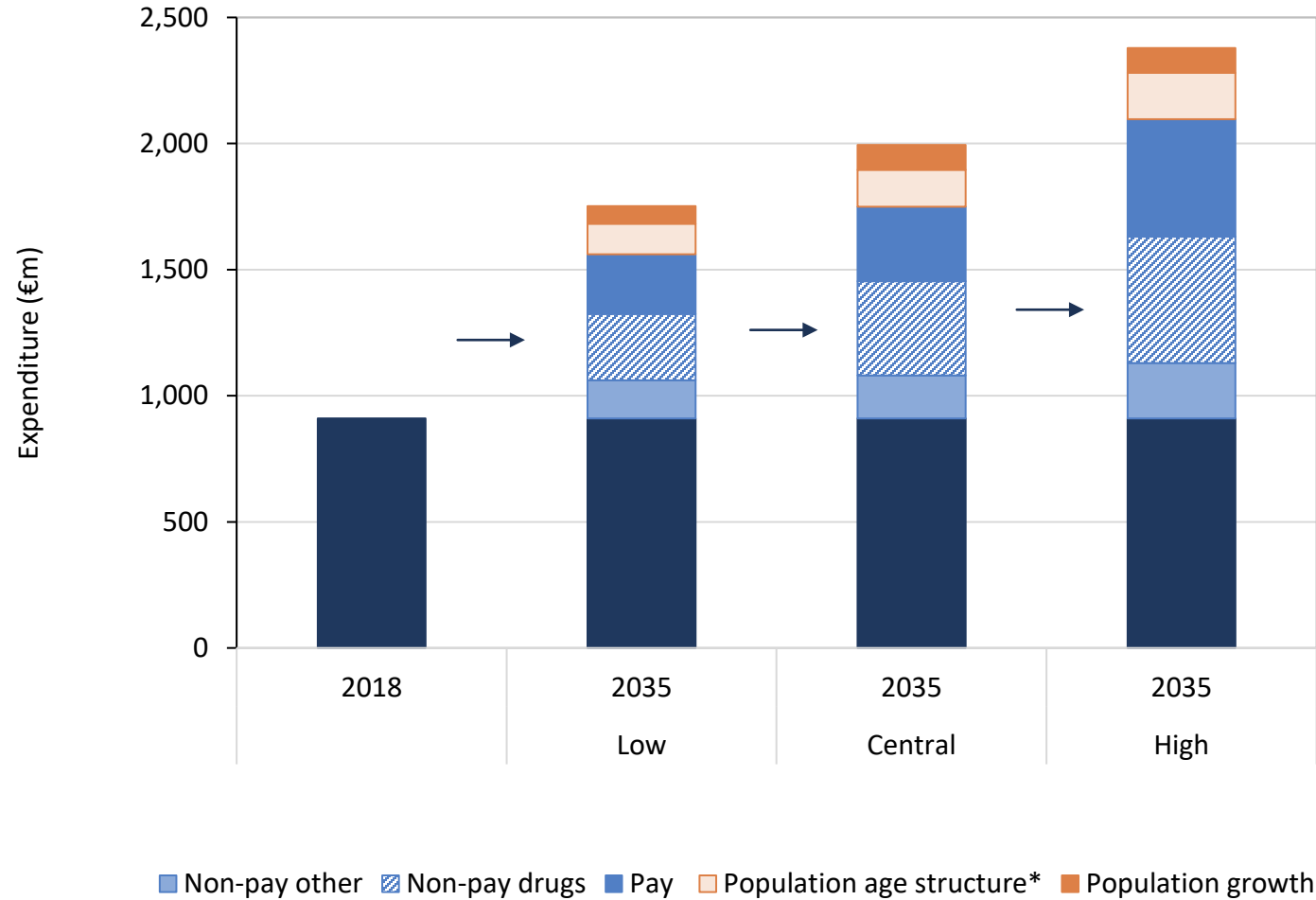
Outpatient



In-patient



DECOMPOSITION – DAY PATIENTS



PROJECTIONS OF GROSS HOSPITAL EXPENDITURE

- In nominal terms, we project gross expenditure requirements for public acute hospital care of between €10.8bn and €14.4bn by 2035, compared to expenditure of €5.9bn in 2018
 - 82 to 143 per cent increase

	Nominal expenditure growth (average annual)				
2013-2018			4.5		
	Low	Central	High	Progress	Central – adjusted
2018-2025	3.3	4.1	5.3		
2026-2030	3.8	4.4	5.5		
2031-2035	3.8	4.3	5.4		
2018-2035	3.6	4.3	5.4		

AGGREGATE EXPENDITURE GROWTH

- In nominal terms, we project gross expenditure requirements for public acute hospital care of between €10.8bn and €14.4bn by 2035, compared to expenditure of €5.9bn in 2018

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2031-2035	3.8	4.3	5.4	4.1	
2018-2035	3.6	4.3	5.4	4.1	

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	Nominal expenditure growth (average annual)				
2013-2018	4.5				
	Low	Central	High	Progress	Central – adjusted
2018-2025	3.3	4.1	5.3	4.5	6.0
2026-2030	3.8	4.4	5.5	4.2	4.4
2031-2035	3.8	4.3	5.4	4.1	4.3
2018-2035	3.6	4.3	5.4	4.1	5.1

SUMMARY

- Public acute hospital expenditure in 2018 was **€5.9bn**
- This is projected to increase by
 - between **1.2** to **1.7%** on average, per year in **real terms** to 2035
 - Driven by growing and ageing population
 - between **3.6** to **5.4%** on average, per year in **nominal terms** to 2035
 - Driven by the increasing cost of care delivery, particularly pay
- Projected growth greatest for acute day patient and in-patient care
 - Older age profile, complexity adjustment, drugs

POLICY IMPLICATIONS

- Significant investment in capacity and workforce (including resources to address unmet demand)
- Some acute care could be more appropriately delivered in the community and would be expenditure saving to the acute system (but in turn would require community investment)
- What role for productivity in offsetting some of the projected cost increases?
- Finally – demographic change should be welcomed!
 - while additional resources will be required to finance care needs, sustainability should be viewed in the context of growing national income and tax base

WHAT'S NEXT FOR HIPPOCRATES?

■ 2021

- Projections of private hospital expenditures to 2035
- Non-acute expenditure projections to 2035
- National and regional projected workforce requirements

THANK YOU

- A big thank you to our data providers!



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Phríomh-Oifig
Staidrimh

Central
Statistics
Office





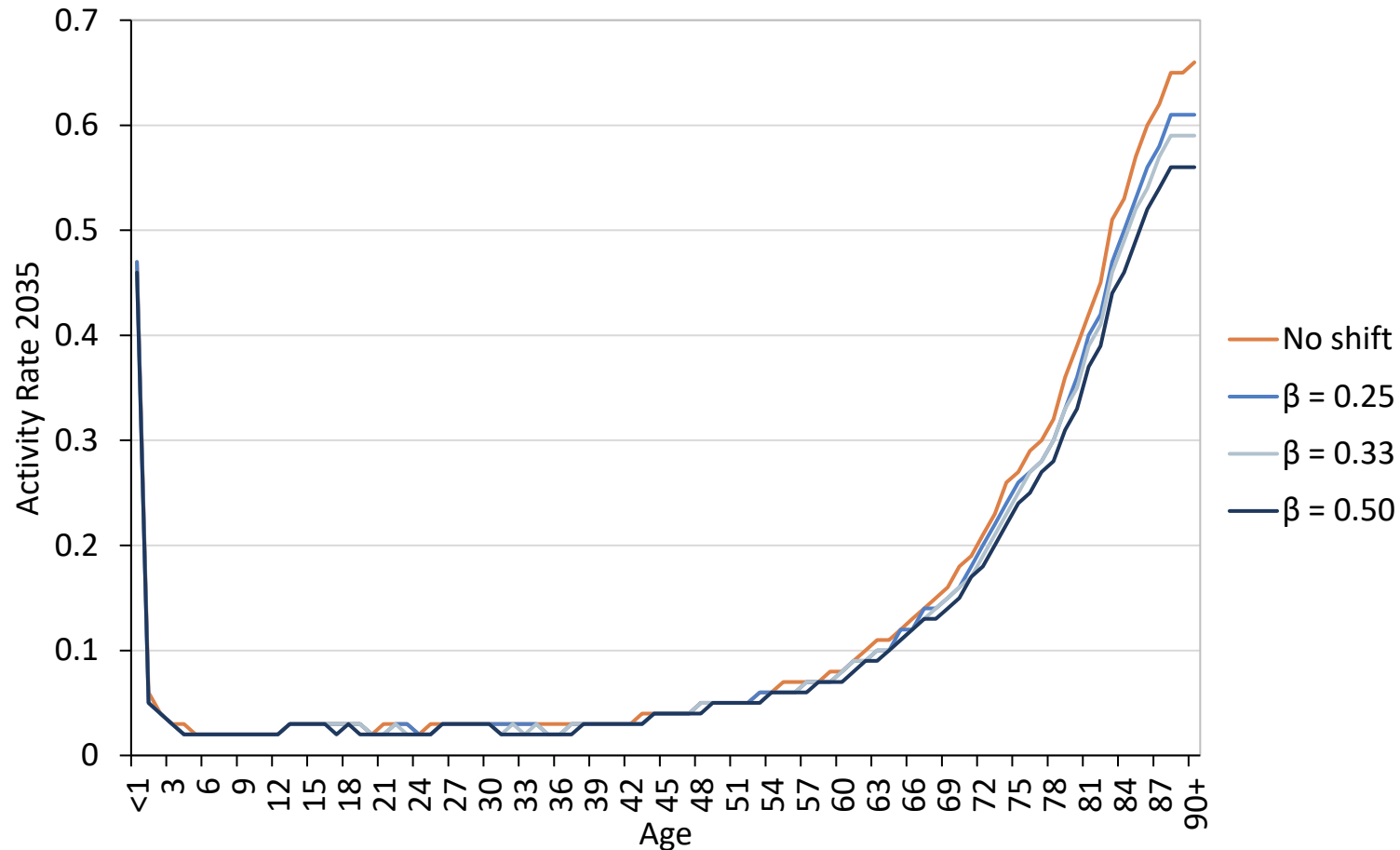
ADDITIONAL MATERIAL



AVOIDABLE HOSPITALISATIONS – REDUCTION RATE

- A parameter is included in the model to allow us to reduce the avoidable hospitalisation rate.

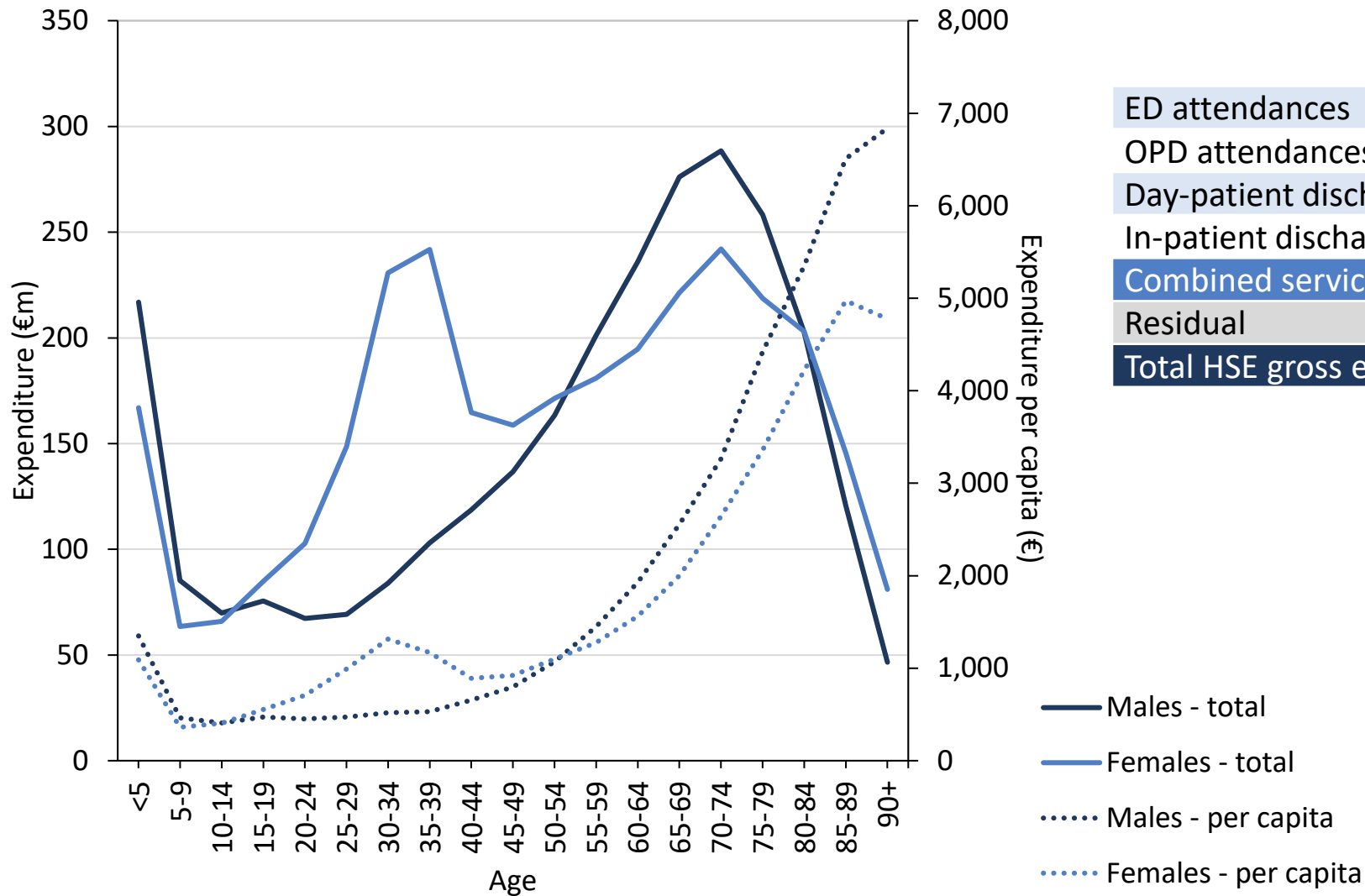
- We assume



SENSITIVITY ANALYSIS

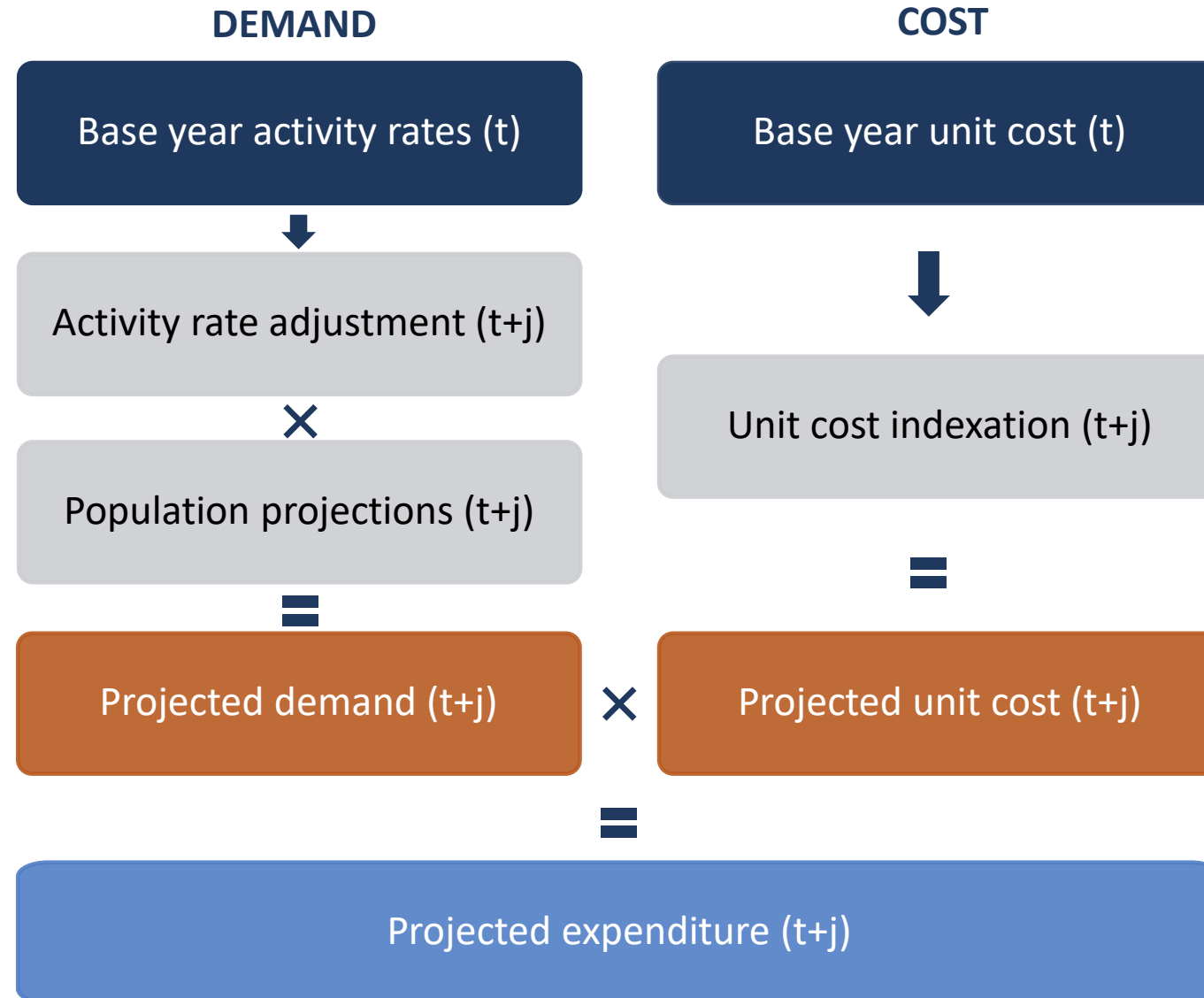
		Public acute hospitals				Psychiatric in-patient
		ED	OPD	Day patients	In-patients	Adult
Projected 2035 expenditures based on central scenario		746	1,062	1,995	6,332	325
Assumption		Percentage effect on 2035 expenditure of changing one assumption (%)				
Population	Low	-3.0	-2.2	-1.6	-2.0	-2.0
	High	7.1	5.3	3.7	4.4	4.8
Healthy ageing	None	1.5	1.7	3.2	4.2	N.A.
	DE	-1.5	-1.7	-3.2	-4.2	N.A.
	CM	-3.0	-3.3	-6.4	-8.4	N.A.
Avoidable hospitalisation reduction	0.25% by 2035	-1.2	N.A.	N.A.	-4.1	N.A.
	0.33% by 2035	-1.6	N.A.	N.A.	-5.4	N.A.
	0.50% by 2035	-2.4	N.A.	N.A.	-8.2	N.A.
Pay	Productivity improvement					
	1.0% p.a.	-11.7	-10.6	-6.6	-9.8	-12.2
	1.5% p.a.	-16.8	-15.4	-9.6	-14.2	-17.6
	Pay freeze					
	2021-2022	-3.7	-3.3	-2.1	-3.1	-3.8
	2021-2022, 1.5% p.a. wage growth thereafter	-12.3	-11.2	-7.0	-10.3	-12.8

BASELINE EXPENDITURE - AGGREGATE



	Expenditures, 2018	
	€m	%
ED attendances	418.6	7.1
OPD attendances (incl. maternity)	676.4	11.4
Day-patient discharges (incl. maternity)	919.5	15.6
In-patient discharges (incl. maternity)	3,220.5	54.5
Combined services total	5,234.9	88.6
Residual	672.2	11.4
Total HSE gross expenditure	5,907.1	100

HIPPOCRATES MODEL – DIAGRAMMATIC REPRESENTATION



UNIT COST BY SERVICE

	ED attendance	OPD attendance	Day patient discharge	In-patient discharge
	€	€	€	€
2015	263	142	733	4,555
2016	270	156	754	4,602
2017	294	163	836	4,794
2018	298	171	885	4,985
Average annual growth 2015–2018	4.2%	6.2%	6.5%	3.1%